

## PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

To:

RAFENOMANJATO, Jean-Pierre  
I.R.G. Infomedia Research Group  
Inc.  
Suite 203  
390, St-Vallier East Street  
Quebec, G1K 3P6  
CANADA

Date of mailing (day/month/year) 02 October 2000 (02.10.00)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference <n°>2609-3	
International application No. PCT/CA99/01168	International filing date (day/month/year) 07 December 1999 (07.12.99)

## 1. The following indications appeared on record concerning:

☒ the applicant      ☒ the inventor      ☐ the agent      ☐ the common representative

Name and Address DUSSAULT, Andre 2055, du Moulin Quebec, Quebec G2B 2B9 Canada	State of Nationality CA	State of Residence CA
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person      ☐ the name      ☐ the address      ☐ the nationality      ☐ the residence

Name and Address	State of Nationality	State of Residence
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 3. Further observations, if necessary:

**Has assigned all his rights and is now no more applicant/inventor.**

## 4. A copy of this notification has been sent to:

☒ the receiving Office      ☐ the designated Offices concerned  
☐ the International Searching Authority      ☒ the elected Offices concerned  
☒ the International Preliminary Examining Authority      ☐ other:

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer Sean Taylor</p> <p>Telephone No.: (41-22) 338.83.38</p>
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## PATENT COOPERATION TREATY

PCT

NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

RAFENOMANJATO, Jean-Pierre  
I.R.G. Infomedia Research Group  
Inc.  
Suite 203  
390, St-Vallier East Street  
Quebec, G1K 3P6  
CANADA

Date of mailing (day/month/year) 15 June 2000 (15.06.00)		IMPORTANT NOTICE	
Applicant's or agent's file reference <n°>2609-3			
International application No. PCT/CA99/01168	International filing date (day/month/year) 07 December 1999 (07.12.99)	Priority date (day/month/year) 07 December 1998 (07.12.98)	
Applicant I.R.G. INFOMEDIA RESEARCH GROUP INC. et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
AU,CN,JP,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CR,CU,CZ,DE,DK,DM,EA,EE,EP,ES,FI,GB,GD,GE,  
GH,GM,HR,HU,ID,IL,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MN,MW,MX,NO,NZ,  
OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on  
15 June 2000 (15.06.00) under No. WO 00/35190

**REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)**

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

**REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))**

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer  J. Zahra  Telephone No. (41-22) 338.83.38
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## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

RAFENOMANJATO, Jean-Pierre  
I.R.G. Infomedia Research Group  
Inc.  
Suite 203  
390, St-Vallier East Street  
Quebec, G1K 3P6  
CANADA

Date of mailing (day/month/year)

02 October 2000 (02.10.00)

Applicant's or agent's file reference

&lt;n°&gt;2609-3

International application No.

PCT/CA99/01168

International filing date (day/month/year)

07 December 1999 (07.12.99)

## IMPORTANT NOTIFICATION

1. The following indications appeared on record concerning:



the applicant



the inventor



the agent



the common representative

Name and Address

DUSSAULT, Andre  
2055, du Moulin  
Quebec, Quebec G2B 2B9  
Canada

State of Nationality

CA

State of Residence

CA

Telephone No.

Facsimile No.

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:



the person



the name



the address



the nationality



the residence

Name and Address

State of Nationality

CA

State of Residence

CA

Telephone No.

Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

**Has assigned all his rights and is now no more applicant/inventor.**

4. A copy of this notification has been sent to:



the receiving Office



the designated Offices concerned



the International Searching Authority



the elected Offices concerned



the International Preliminary Examining Authority



other:

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Sean Taylor

Telephone No.: (41-22) 338.83.38

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 :

H04N 5/445

A3

(11) International Publication Number:

WO 00/35190

(43) International Publication Date:

15 June 2000 (15.06.00)

(21) International Application Number: PCT/CA99/01168

(22) International Filing Date: 7 December 1999 (07.12.99)

(30) Priority Data:

60/111,274

7 December 1998 (07.12.98)

US

(71) Applicant (for all designated States except US): I.R.G. INFOMEDIA RESEARCH GROUP INC. [CA/CA]; 390 St-Vallier East, Quebec, Quebec G1K 3P6 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DUSSAULT, Andre [CA/CA]; 2055 du Moulin, Quebec, Quebec G2B 2B9 (CA). RAFENOMANJATO, Jean-Pierre [CA/CA]; 57 Tardif, St-Etienne-de-Lauzon, Quebec G6J 1N7 (CA).

(74) Agents: RAFENOMANJATO, Jean-Pierre et al.; I.R.G. Infomedia Research Group Inc., Suite 203, 390, St-Vallier East Street, Quebec, G1K 3P6 (CA).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

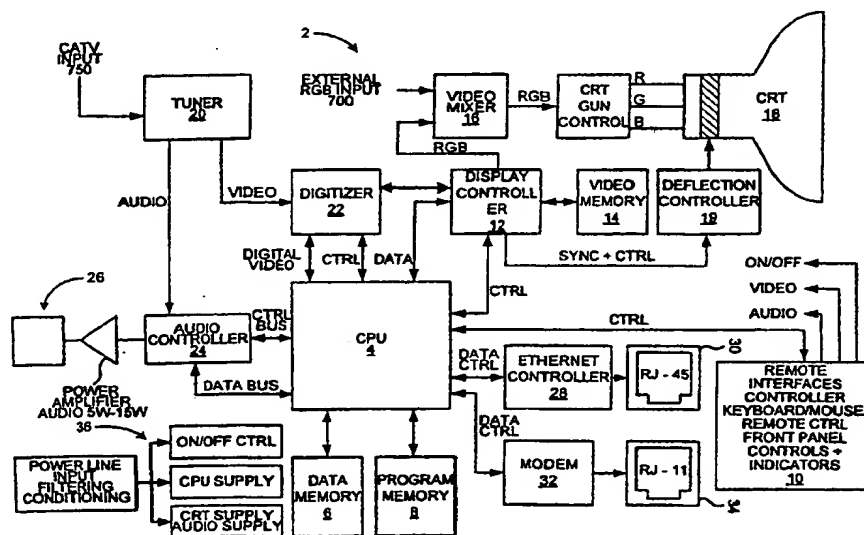
Published

With international search report.

(88) Date of publication of the international search report:

10 August 2000 (10.08.00)

(54) Title: METHOD AND APPARATUS FOR PROVIDING A COMPUTERISED TELEVISION APPARATUS



## (57) Abstract

The invention relates to a computerized television apparatus. The apparatus comprises a computing device for generating a first display signal, a video path having a first input for receiving the first display signal and a second input for receiving a second display signal derived from a television signal to derive a third display signal. The apparatus further comprises a display unit with a given dimension operative for displaying a display image derived from the third display signal. The computing device is a fast boot-up computing device comprising an initial program loader unit. The fast boot-up computing device is operative to process the initial program loader unit to invoke the program elements associated to the respective data elements and to boot-up said computerized television apparatus.

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
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AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
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BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
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CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

# INTERNATIONAL SEARCH REPORT

International Application No. PCT/CA 99 01168

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-13

computerized television apparatus with a high resolution screen

2. Claims: 14-20

fast boot-up computing device for a a computerized television apparatus

# INTERNATIONAL SEARCH REPORT

international application No.  
PCT/CA 99/01168

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>&lt;n &gt;2609-3</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/CA 99/ 01168</b>	International filing date (day/month/year) <b>07/12/1999</b>	(Earliest) Priority Date (day/month/year) <b>07/12/1998</b>
Applicant <b>I.R.G. INFOMEDIA RESEARCH GROUP INC. et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23 1(b))

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☒ Unity of invention is lacking (see Box II).

## 4. With regard to the title,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

## 5. With regard to the abstract,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

## 6. The figure of the drawings to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

6



None of the figures.



# INTERNATIONAL SEARCH REPORT

International application No.

PCT/CA 99/ 01168

## Box III · TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The abstract has been shortened as follows:

line 7 : after "unit" insert " with a given dimension"

line 9 : delete from "The display ..... until line 12 ...a variant."

Proceed with: "The computing device is a fast boot-up computing device comprising an initial program loader unit.

line 15: delete until line 19

Proceed with "The fast boot-up .....etc.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA 99/01168

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

**1. Claims: 1-13**

computerized television apparatus with a high resolution screen

**2. Claims: 14-20**

fast boot-up computing device for a a computerized television apparatus

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 99/01168

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H04N5/445

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 36391 A (GATEWAY 2000 INC) 2 October 1997 (1997-10-02)	1-8, 13
A	page 3, line 17 - line 25 page 5, line 21 - line 24 page 8, line 23 - page 9, line 11 page 10, line 19 - line 31 page 16, line 1 - page 17, line 11; figures 1A, 1B, 3, 5	9-11
A	EP 0 713 174 A (NINTENDO CO LTD) 22 May 1996 (1996-05-22) column 32, line 11 - column 33, line 24	14



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

17 May 2000

Date of mailing of the international search report

24.05.2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Yvonnet, J

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA 99/01168


Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9736391	A	02-10-1997	US 5867223 A	02-02-1999
			AU 2332397 A	17-10-1997
			CA 2250189 A	02-10-1997
			EP 0890232 A	13-01-1999
			US 5838384 A	17-11-1998
EP 0713174	A	22-05-1996	US 5680534 A	21-10-1997
			AU 691334 B	14-05-1998
			AU 3453795 A	09-05-1996
			JP 8241427 A	17-09-1996

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

14

Applicant's or agent's file reference <n>2609-3	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/CA99/01168	International filing date (day/month/year) 07/12/1999	Priority date (day/month/year) 07/12/1998
International Patent Classification (IPC) or national classification and IPC H04N5/445		
Applicant I.R.G. INFOMEDIA RESEARCH GROUP INC. et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"><li>I <input checked="" type="checkbox"/> Basis of the report</li><li>II <input type="checkbox"/> Priority</li><li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li><li>IV <input checked="" type="checkbox"/> Lack of unity of invention</li><li>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li><li>VI <input type="checkbox"/> Certain documents cited</li><li>VII <input checked="" type="checkbox"/> Certain defects in the international application</li><li>VIII <input checked="" type="checkbox"/> Certain observations on the international application</li></ul>		
Date of submission of the demand  21/06/2000	Date of completion of this report  26.03.2001	
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Moorhouse, D  Telephone No. +49 89 2399 8631	



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/CA99/01168

## I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).):*

### Description, pages:

1-17 as originally filed

### Claims, No.:

1-20 as originally filed

### Drawings, sheets:

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/CA99/01168

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**IV. Lack of unity of invention**

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.  
☐ paid additional fees.  
☐ paid additional fees under protest.  
☒ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.  
☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☐ all parts.  
☒ the parts relating to claims Nos. 1-13.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes:	Claims 1-13
	No:	Claims

Inventive step (IS)	Yes:	Claims
	No:	Claims 1-13



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/CA99/01168

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Industrial applicability (IA)    Yes:    Claims    1-13  
   No:    Claims

2. Citations and explanations  
**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

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**Concerning Box IV**

The application lacks unity, for the reasons set out in Form 206 issued by the EPO acting as ISA and referred to in the invitation to restrict or pay further fees in Form 405 issued by the present IPEA.

Since the Applicant has not replied to said invitation, the IPEA has applied the procedure set out in Article 34 (3) (c) PCT and examine what appears to be the "main" alleged invention in the present application. Since the application does not indicate that either of the searched alleged inventions (dot pitch, claims 1 to 13; fast boot-up, claims 14 to 20) is more important than the other, the IPEA has examined the first alleged invention, pursuant to Rule 68.5 PCT.

**Concerning Box V**

The following document is cited:

D1 : WO-A-97/36391

The subject-matter of claims 1 to 13 lacks an inventive step, and therefore does not meet the requirement set out in Article 33 (3) PCT.

In detail, it is known from document D1 to provide a computerized television apparatus (see, for example, Figures 1A and 1B and associated description passages). This apparatus includes a video path (on the VGA card 318) that can receive both TV signals (see, for example, satellite dish 114 in Figure 1 or inputs 524 and 544 to 548 in Figure 5) and signals from a computer 118 (via PCI bus 312). The said path outputs a signal (e.g. via output 542) to a monitor 120.

On page 10, line 19 to page 11, line 14 of document D1 it is disclosed that the dot pitch is as follows :

0.65 - 0.80mm for a 29" (737mm) diagonal CRT  
0.80 - 0.95mm for a 33" (838mm) diagonal CRT.

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Reducing these values to a fraction of the diagonal size, results in the following ranges:

0.0008820 - 0.001086 x diagonal (29"/737mm CRT)

0.0009547 - 0.001137 x diagonal (33"/838mm CRT).

The range claimed is:

0.0008528 - 0.001250 x diagonal.

It will be noted that the claimed range is broader than the known ranges, so that novelty is not at issue.

Thus, the subject-matter of claims 1 to 13 meets the requirement set out in Article 33 (2) PCT.

However, given that the skilled person is taught, at page 11, lines 1 to 4, that the above specifications may vary, but are designed to provide optimal viewability, the said skilled person would find it obvious to experiment with the exact dot pitch / diagonal relationship, and optimize it for a given screen size, desired display resolution, brightness, etc. There can be no surprising effect in extending the range slightly, especially given the number of other contributing variables.

Thus, the subject-matter of claim 1 follows in an obvious manner from the disclosure of document D1.

The subject-matter of the following claims is either disclosed in or rendered obvious by the disclosure of document D1:

Claim 3 - see, for example, connectors 524 and 212;

Claim 5 - see element 322 in Figure 3;

Claims 6 and 7 - see page 10, lines 24 to 31;

Claims 8 to 10 - see Video MUX 540 in Figure 5;

Claim 11 - see PC 18;

Claim 13 - see page 10, line 31.

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The subject-matter of claims 2, 4 and 12 relates to routine design details, the suggestion of which the skilled person, on reading the disclosure of document D1, would have no difficulties in suggesting.

**Concerning Box VII**

The claims are not in the two-part form set out in Rule 6.3 (b) PCT.

Reference signs as defined in Rule 6.2 (b) PCT are absent from the claims.

The wording "spirit of the invention" (page 10, line 12; page 11, line 9; page 13, line 5 and page 17, line 12) constitutes unnecessary subject-matter pursuant to Rule 9.1 (iv) PCT and, moreover, casts doubt on the scope of protection sought, contrary to Article 6 PCT.

The "inclusion by reference" on page 1 may be objectionable in some national and regional jurisdictions. (See IPE Guidelines, PG-II, 4.17).

**Concerning Box VIII**

Claim 1 lacks clarity / support in the description and thus does not meet the requirements set out in Article 6 PCT.

This objection arises because it is not at all clear what is meant by "given dimension". Is this an area, a length, and in the latter case is it related to the screen area, or is it the depth (front to back) of the display ?